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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,492	04/02/2004	David M. Rinehart	AD6992 USNA	2324

23906 7590 04/27/2006

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EXAMINER

THOMAS, ALEXANDER S

ART UNIT PAPER NUMBER

1772

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/817,492

Applicant(s)

RINEHART ET AL.

Examiner

Alexander Thomas

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-32 is/are allowed.
- 6) ☒ Claim(s) 1, 10-17 and 20 is/are rejected.
- 7) ☒ Claim(s) 2-7, 18, 19, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/9/06</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 2, 3 and 18 are objected to because of the following informalities: there is no antecedent basis for the term “second glazing structure” in claim 3 or the term “interlocking element” in claims 2 and 18. It is suggested that the term – second glazing element -- be used in place of “second glazing structure”. Appropriate correction is required.

### ***Double Patenting***

2. The double patenting rejections set forth in the previous office action have been overcome by the filing of the terminal disclaimer and in view of applicants' arguments.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 00/64670. Applicants' arguments have been considered but are not deemed persuasive. Applicants argue that the reference doesn't disclose “an element that can be interlocked with a second glazing element” or an element useful for aligning the glazing element. Neither of these two statements provide any specific structure feature to the claimed article. Furthermore, any of the elements 10D, 10E, 15, 21, etc. shown in

the figures of the reference could be interlocked with a second glazing element and could be useful for aligning the element.

5. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Walters et al. Applicants' arguments have been considered but are not deemed persuasive. Applicants argue that the reference doesn't disclose "an element that can be interlocked with a second glazing element" or an element useful for aligning the glazing element. Neither of these two statements provide any specific structure feature to the claimed article. Furthermore, the opening 28 could be used to interlock the element 10 with a second glazing element and could be used for aligning the element.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/64670 in view of either applicants' acknowledged state of the art or Bolton et al ('346). The primary reference discloses the invention substantially as claimed; see Figure 4. However, it does not disclose the claimed thermoplastic interlayer material. The secondary references disclose the claimed interlayer materials as layers used in glazing laminates; see the instant specification page 5, line 26 through page 7, line 2 and note that Bolton et al disclose the use of Surlyn as an interlayer in glazing

elements. It would have been obvious to one of ordinary skill in the art to use a known interlayer, such as Surlyn, in the product of the primary reference in view of the secondary references depending on the desired structural properties for a particular end use.

8. Claims 16, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/64670 in view of either applicants' acknowledged state of the art or Bolton et al ('346) as applied to claims 11-14 above, and further in view of Biebuyck 6,158,182. Biebuyck discloses placing glazing units between a pressure plate and a mullion in order to mount the glazing unit; see Figure 6 and column 5, line 55 through column 6, line 6. It would have been obvious to one of ordinary skill in the art to mount the glazing unit of the prior art in the structure disclosed in Biebuyck in order to provide a means of mounting the glazing units into a wall structure.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/64670 in view of Biebuyck. The primary reference discloses the invention substantially as claimed; see Figure 4. However, it does not disclose the use of a pressure plate and a mullion in order to mount the glazing unit. Biebuyck discloses placing glazing units between a pressure plate and a mullion in order to mount the glazing unit; see Figure 6 and column 5, line 55 through column 6, line 6. It would have been obvious to one of ordinary skill in the art to mount the glazing unit of the prior art in the structure disclosed in Biebuyck in order to provide a means of mounting the glazing units into a wall.

***Allowable Subject Matter***

10. Claims 2-7, 18, 19, 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. Claims 23-32 are allowed.

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Thomas whose telephone number is 571-272-1502. The examiner can normally be reached on 6:30-4:00 M-THUR.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Alexander S. Thomas".

ALEXANDER S. THOMAS  
PRIMARY EXAMINER